IUCN Conservation Outlook Assessment 2014 **(archived)**
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Please note: this is an archived Conservation Outlook Assessment for Maloti-Drakensberg Park. To access the most up-to-date Conservation Outlook Assessment for this site, please visit https://www.worldheritageoutlook.iucn.org.

Maloti-Drakensberg Park

SITE INFORMATION

Country:
Lesotho, South Africa
Inscribed in: 2000
Criteria:
(i) (iii) (vii) (x)

Site description:

The Maloti-Drakensberg Park is a transboundary site composed of the uKhahlamba Drakensberg National Park in South Africa and the Sehlathebe National Park in Lesotho. The site has exceptional natural beauty in its soaring basaltic buttresses, incisive dramatic cutbacks, and golden sandstone ramparts as well as visually spectacular sculptured arches, caves, cliffs, pillars and rock pools. The site's diversity of habitats protects a high level of endemic and globally important plants. The site harbors endangered species such as the Cape vulture (Gyps coprotheres) and the bearded vulture (Gypaetus barbatus). Lesotho’s Sehlabathebe National Park also harbors the Maloti minnow (Pseudobarbus quathlambae), a critically endangered fish species only found in this park. This spectacular natural site contains many caves and rock-shelters with the largest and most concentrated group of paintings in Africa south of the Sahara. They represent the spiritual life of the San people, who lived in this area over a period of 4,000 years.
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SUMMARY

2014 Conservation Outlook

Good with some concerns

The most significant threats to the biodiversity values of the site are from alien invasive plant species and from too high burning frequency, particularly at high altitudes. Together these threats might pose a serious threat to the outstanding biodiversity values becoming damaged. Other threats are, however, low. Threats to the scenic values are largely from outside the core area within the buffer zone. Possible developments near the site (e.g. wind farms) could have severe impacts on its values. Protection and management within the two national parks of which this transboundary site is composed is effective, but the Management Authorities need additional support from governments in order to counter the threats and ensure effective transboundary cooperation.

Current state and trend of VALUES

Low Concern
Trend: Stable

In terms of biodiversity values it is considered that the threats posed by infestations of alien invasive plants and the possible high frequency of fires are not at a level where the Outstanding Universal Value of the site has been damaged. Nevertheless the potential remains. The scenic values of the core area are currently safe.

Overall THREATS

Low Threat

The most significant threats to the biodiversity values of the site are from alien invasive plant species and from too high burning frequency, particularly at high altitudes. Together these threats might pose a serious threat to the outstanding biodiversity values becoming damaged. Other threats are, however, low. Threats to the scenic values are largely from outside the core area within the buffer zone.

Possible developments near the site (e.g. wind farms) could have severe impacts on its values. Impacts of climate change on sensitive montane grassland and wetland species is anticipated.

Overall PROTECTION and MANAGEMENT

Mostly Effective

This transboundary site consists of the uKhahlamba Drakensberg National Park managed in accordance with an Integrated Management Plan and the the Sehlabathebe National Park in Lesotho. The management capacity of the latter is currently rather limited and the Joint Management Committee could help share and build capacity in Lesotho. Much progress has been made in defining and identifying appropriate and inappropriate developments within the buffer zone and have undertaken public consultation. It is expected that this process will result in improved integration of the site into local and regional plans and greater support for the site by communities.

FULL ASSESSMENT

Description of values

Values

World Heritage values

- **Outstanding scenic value expressed by the topographic variation, geology and vegetation**
  Criterion:(vii)

  The outstanding scenic value is expressed largely by the topographic variation, geology and vegetation. The Drakensberg mountains have high escarpment walls of dark basalt that lie above a high layer of golden clarens sandstone. Soaring basaltic buttresses, incisive dramatic cutbacks and golden sandstone ramparts all contribute to a spectacular environment. There are long spurs, switchbacks and gorges through which waterfalls, pools and rivers flow. This landscape is covered by green grasslands in summer which turn to red in autumn and may then be snow covered at times during the colder winter (Statement of Significance, 2000).

- **Outstanding plant species richness**
  Criterion:(x)

  The site lies within the Drakensberg Alpine Region of Southern Africa and is part of the Southern African Montane (high altitude) Grassland system. It is a Centre of Biodiversity with high plant species richness. Among a total of 2,153 species of plant are included a large number of internationally and nationally threatened species. A significant feature is the high level of plant species endemism. Uniquely the grasslands reflect sharp altitudinal and topographic gradients (Statement of Significance, 2000).

▶ **Large number of endemic and globally threatened bird species**
Criterion:(x)

The site's diversity of habitats protects a high level of endemic and globally threatened bird species. The avifauna of the site includes 296 species (Statement of Significance, 2000).

Other important biodiversity values

▶ **Paleo-invertebrate, reptile and mammal species**

Little is known about the many endemic paleo-invertebrates particularly those species that inhabit the high altitude vegetation communities. Reptile fauna is also poorly understood although with relatively high diversity. Large mammals are well known but the diverse small mammal fauna is also poorly known.

Assessment information

Threats

Current Threats
Low Threat

The most significant threats to the biodiversity values of the site are from alien invasive plant species and from too high burning frequency, particularly at high altitudes. Together these threats might pose a serious threat to the outstanding biodiversity values becoming damaged. Other threats are, however, low. Threats to the scenic values are largely from outside the core area within the buffer zone.

▶ **Forestry/ Wood production**
Low Threat

Inside site
Outside site

A land reform development with forestry projects is taking place in adjacent municipal area.The development is outside of the core area of the site but within its buffer zone. However, aesthetic values of the site are affected (R3).

► Housing/ Urban Areas

Low Threat
Inside site
Outside site

There are proposals that would change the Town Plan for the Cathkin Park village on the boundary from tourism to residential. Sub-division of agricultural land allow for residential development. There is and increased number of rural homes in communally owned areas including the western boundary with Lesotho. The developments are outside of the core area of the site but within its buffer zone. Aesthetic values are affected mainly locally both in approaching / traveling towards the site and views outward from the site (R3).

► Livestock Farming / Grazing

Low Threat
Inside site
Outside site

Possible intensification of dairy farming with associated infrastructure development (dams, pastures) would affect the site.
Communally owned areas in Lesotho on unfenced western boundary are subject to overgrazing with regular incursions into Park. Overgrazing of the high altitude grassland would result in loss of palatable grass species and loss of other plant species due to erosion and trampling (R3, R4, R5, R6, R13).

► Marine/ Freshwater Aquaculture

Low Threat
Outside site

The expansion of the trout fish farm on Bushmans river might have a localized aesthetic impact. Possible escape of trout into the river also represents a minor threat (research has demonstrated adverse impacts of

trout, an alien species, on biodiversity) (R7).

► Mining/ Quarrying

Low Threat
Outside site

Letsing Diamond Mine (near western boundary in Lesotho) is to be expanded four fold. Possible two new diamond mines may be developed in future. Small road quarries have visual impact on sense of place. The developments are outside of the core area of the site but within its buffer zone. (R3, R13).

► Roads/ Railroads

Low Threat
Inside site
Outside site

Upgrade of the Sani Pass road is underway. It will allow for much increased traffic as well as the section form Sani Top to Mahotlong. Upgrade of the road and pass to Sani Top will also increase the number of tourists to this high altitude sensitive area. The proposed development of a cable car and a possible lease of a tourism site to a private developer will also add to the increase in tourist numbers.
The sense of place would be adversely affected thus impacting on the wilderness experience of visitors (R3).

► Utility / Service Lines

Low Threat
Outside site

Collisions between raptors including vulture species and other large birds with powerlines has a adverse impact on the viability of the various species populations. Mitigation measures are essential (R8, R9, R10, R13).

► Flight Paths

Very Low Threat
Outside site

Sound pollution affects the wilderness experience of some visitors (R3).

▶ Subsistence hunting

Very Low Threat
Inside site
Outside site

Levels of harvesting / poaching are low (R3, R4).

▶ Fire/ Fire Suppression

High Threat
Inside site
Outside site

High altitude sub-alpine vegetation is being burnt too frequently with fires originating from Lesotho. High fire frequency will result in loss of some plants and animals and may ultimately lead to some extinctions in time. Wild fires are frequent occurrence in these high altitude grasslands in winter-spring (R1, R 11).

▶ Invasive Non-Native/ Alien Species

Very High Threat
Inside site
Outside site

Several invasive alien plant species threaten the natural vegetation communities and habitats (e.g. pine, wattle, American bramble, etc). Alien invasive plant species replace and compete with indigenous plants leading to a change in composition of vegetation communities and loss of species and habitats, change of sense of place and accessibility Forestry plantations outside of Park provide an important seed source. (R1, R3).

Potential Threats

High Threat

Possible developments near the site (e.g. wind farms) could have severe impacts on its values. Impacts of climate change on sensitive montane grassland and wetland species are anticipated.

▶ Oil/ Gas exploration/development

Data Deficient

Inside site
Outside site

There is no information at present. Should exploration result is gas exploitation impacts could be potentially severe (R3).

► Renewable Energy

Low Threat
Inside site
Outside site

Lesotho Highlands Water Development Phase 2 incorporates a large dam where hydro power would also be generated. The developments are outside of the core area of the site but within its buffer zone. (R3).

► Renewable Energy

Very High Threat
Inside site
Outside site

Two wind (with associated infrastructure) are at an advanced stage of planning near western boundary with Lesotho. Others are in the ‘pipe line’. However, little information about the projects is available at present. Vortex modeling indicates that even limited wind farm development will have severe adverse impacts on raptor species particularly the endangered Bearded vulture and endemic Cape Griffon and would lead to their extinction within the site and regionally (R3, R13).

► Air Pollution

Low Threat
Inside site
Outside site

Fall out of air born particles pollutants (acid rain) from coal fired power stations to the north (Mpumulanga province) carried by high altitude winds has been recorded (R3).

► Identity/ Social Cohesion/ Changes in local population and community

Data Deficient

Outside site

Population increase and densification of settlements in surrounding areas of communal land cause ever increasing levels of ecological fragmentation and biological isolation of the Park. Reduced biological connectivity may result in some species becoming extinct particularly given predicted increased rates of climate change (R1, R3, R13).

Protection and management

Assessing Protection and Management

► Relationships with local people

Mostly Effective

Engagement and communication structures are in place and operative e.g. Community Forums, Local Boards, and Park staff providing conservation teaching services to communities (R3).
There are some unresolved land claims by communities who were disposed of their land during the apartheid period. A land swap (Park land in exchange for high altitude uninhabited communally owned land) has been proposed. Although ownership of land might change if a land claim is successful, it should not lead to any change in land use. Therefore the integrity of the site would remain unaffected. However, co-management of protected areas is proving to be problematic.
A land swap is unlikely to succeed, but there is community pressure on low-lying areas to permit stock grazing (R3).
Increasing levels of poverty of people living in communal areas adjacent to the Park. Communities are frustrated by lack of service delivery by government that would improve their livelihoods.
Should these social issues not be addressed there would be a growing risk of the park being invaded by these people in order to access resources for their survival (R1, R3, R 13).

► Legal framework and enforcement

Highly Effective

Comprehensive World Heritage, Conservation and Environmental laws and

policies are in place and being implemented (R1, R3).

▶ Integration into regional and national planning systems

Some Concern

Park is integrated into provincial and national biodiversity and tourism plans. Of concern is that integration at the local municipal level is poor / inadequate (R1, R3).

▶ Management system

Highly Effective

This transboundary site links the Sehlabathebe National Park in Lesotho with uKhahlamba Drakensberg Park in South Africa. Management is based on an Intergraded Management Plan and subsidiary plans, all of which are being implemented. Management staff is capacitated and receives in service training. Research is actively carried out (R1, R2; SoOUV, 2013).

▶ Management effectiveness

Mostly Effective

The uKhahlamba Drakensberg Park, composed of 12 protected areas established between 1903 and 1973 has a long history of effective conservation management. Management Effectiveness assessments have recently been conducted and a +70% score achieved (R3, R12; SoOUV, 2013).

▶ Implementation of Committee decisions and recommendations

Mostly Effective

Generally most decisions and recommendations are implemented. There may be a delay in implementation due to insufficient staff or other management priorities. Recommendations by the World Heritage Committee to link / incorporate the northern portion to the southern part of the site have made significant progress with the communities that own the land (R3, R12).

▶ Boundaries

Mostly Effective

Generally highly effective although the international western boundary is not

demarcated and has resulted in legal issues and law enforcement challenges (R1, R3, R12).

► Sustainable finance

Some Concern

Funds for management of the site are allocated on a budget annually. However these are insufficient to deal with some high priority threats such as alien invasive plant control, path maintenance and cultural heritage management (R1, R3).

► Staff training and development

Mostly Effective

In service and external training and skills development is implemented on several important aspects of biodiversity management , conservation and environmental management (R3).

► Sustainable use

Highly Effective

All natural resources that are used are done so on a sustainable basis with procedures and monitoring in place (R3, R12).

► Education and interpretation programs

Some Concern

A lot more could be done in the fields of education and interpretation of the natural features, biodiversity and rock art in the site (R1, R3).

► Tourism and interpretation

Mostly Effective

Facilities have a relatively high level of occupancy by visitors as a result of marketing the Park as a prime destination for tourists both local and international (R1, R3).

► Monitoring

Mostly Effective

Climate, fire, large mammals, and vultures are monitored annually. There is a need to increase monitoring especially of invertebrates, birds, small mammals, plants, and indicators of climate change (R1, R3).

► Research

Highly Effective

There is a suit of research projects being undertaken by university students and scientific staff of the Management Authority resulting in publications in journals and theses. Priority research projects are identified and a formal project registration and approval process is in place. Two new research facilities have been opened (R1, R3).

Overall assessment of protection and management

Mostly Effective

This transboundary site consists of the uKhahlamba Drakensberg National Park managed in accordance with an Integrated Management Plan and the the Sehlabathebe National Park in Lesotho. The management capacity of the latter is currently rather limited and the Joint Management Committee could help share and build capacity in Lesotho. Much progress has been made in defining and identifying appropriate and inappropriate developments within the buffer zone and have undertaken public consultation. It is expected that this process will result in improved integration of the site into local and regional plans and greater support for the site by communities.

► Assessment of the effectiveness of protection and management in addressing threats outside the site

Some Concern

Generally the site is threatened by urban, tourism, infrastructure, agriculture and forestry developments and land uses and their cumulative impacts outside of the core area and within the buffer zone. EKZNW which is the management authority of the site through the EIA process is able to influence environmental impact decisions made by ministries and decision makers including submission of a legal Appeal. Its ability to influence decisions made in the neighbouring country of Lesotho is limited by bureaucratic and political

procedures.

▶ **Best practice examples**

The methodology and process implemented by EKZNW in assessing management effectiveness of the various protected areas under its control is considered to be a significant best practice and more rigorous example that could be used by other World Heritage site managers. The process of developing the buffer zone has been very active and inclusive, all government departments and municipalities are involved and is a good example of co-operative governance.

State and trend of values

Assessing the current state and trend of values

World Heritage values

▶ **Outstanding scenic value expressed by the topographic variation, geology and vegetation**
Low Concern
Trend:Stable

The scenic values of the site are threatened by urban, tourism, infrastructure, agriculture and forestry developments and land uses and their cumulative impacts outside of the core area and within the buffer zone However, the Outstanding Universal Value of the site is still preserved (R1, R3, R13).

▶ **Outstanding plant species richness**
Low Concern
Trend:Stable

EKZNW is a competent conservation agency with a well capacitated and trained staff. The biodiversity values of the site are safeguarded by the conservation staff that implements a hierarchy of integrated management plans and procedures. There is concern about alien invasive plant species and a possible high frequency of fires, as well as the ongoing land use

developments outside the site that results in ecological isolation of the site, habitat loss and fragmentation. Research and monitoring is in place (R1, R3, R12).

► Large number of endemic and globally threatened bird species

High Concern
Trend:Deteriorating

The population of Bearded vulture and Cape Griffon have shown a reduction in population size and breeding success (nest sites no longer in use). A monitoring and research programme is ongoing. The main agents of mortality affecting the population of these birds are the feeding on carcasses that have been poisoned by rural people and birds colliding with power lines. Body parts of the vultures have been found in traditional medicine markets. A bilateral Biodiversity Management Plan for vultures is in the process of being developed but implementation in both countries remains challenging.

Other important biodiversity values

► Paleo-invertebrate, reptile and mammal species

Little is known about the many endemic paleo-invertebrates particularly those species that inhabit the high altitude vegetation communities. Reptile fauna is also poorly understood although with relatively high diversity. Large mammals are well known but the diverse small mammal fauna is also poorly known.

Summary of the Values

► Assessment of the current state and trend of World Heritage values

Low Concern

Trend: Stable

In terms of biodiversity values it is considered that the threats posed by infestations of alien invasive plants and the possible high frequency of fires are not at a level where the Outstanding Universal Value of the site has been damaged. Nevertheless the potential remains. The scenic values of the core

area are currently safe.

▶ **Assessment of the current state and trend of other important biodiversity values**

Data Deficient

Trend: Data Deficient

Little is known about the many endemic paleo-invertebrates particularly those species that inhabit the high altitude vegetation communities. Reptile fauna is also poorly understood although with relatively high diversity. Large mammals are well known but the diverse small mammal fauna is poorly known.

Additional information

Key conservation issues

▶ **A buffer zone that provides an added layer of protection.**

National

Integration of the site into municipal and provincial plans that addresses land uses and developments that threaten the values of the site is needed urgently given the rate of transformation. For several years EKZNW staff has run with a programme to establish an effective buffer zone on the South African side. Interventions and assistance focused on Lesotho could deliver a buffer zone outcome along the western boundary. The matter is being dealt with locally and ‘in-house’ and must be taken up at higher levels of government if it is to succeed i.e. municipal, provincial and national, departments.

▶ **Infestations of alien invasive plants.**

Local

Inadequate control / eradication of infestations of alien invasive plant species that displace indigenous plants and modify grassland and forest habitats for animal species.

▶ **Wild and arson fires.**

Local

More strategic and effective fire control management that seeks cooperation of communities bordering the site.

▶ **Declining population of Bearded vulture, Cape Griffon and other raptor species.**

Regional

The main agents of mortality affecting the population of these birds are the feeding on carcasses that have been poisoned by rural people and birds colliding with power lines. Body parts of the vultures have been found in traditional medicine markets. A bilateral Biodiversity Management Plan for vultures is in the process of being developed but implementation in both countries remains challenging.

Benefits

Understanding Benefits

▶ **Water provision (importance for water quantity and quality)**

The site is the major high quality water producing area in South Africa (i.e. the water factory) supporting + 60% of the country's GDP and the livelihoods of a large majority of the population (R15).

▶ **Is the protected area valued for its nature conservation?**

The biodiversity, scenic and wilderness values provided by the site are highly significant in contributing to South Africa meeting its obligations and requirements of the Convention on Biological Diversity and is recognized by both South African and overseas visitors

▶ **Carbon sequestration**

Studies have shown that the site is a major / significant contributor for the

sequestration of carbon and other benefits.

- **History and tradition, Wilderness and iconic features, Sacred natural sites or landscapes**

  The site is the world’s richest for outstanding San rock art (greatest number of sites and highest density of quality images). It is also the country’s largest wilderness area.

- **Outdoor recreation and tourism**

  The site provides a number of rest camps, camp sites and other facilities for tourists. Outside the site are many private facilities for tourist accommodation and recreation. The site is therefore an important destination for the country’s tourism industry (i.e. amongst the top 10 regions).

- **Importance for research**

  Many research projects (natural science, archaeology) have been and are being undertaken that have resulted in numerous publications. The site is also important for conservation and environmental education and is used by many school, university, technicon, and adult groups.

- **Does management of the site provide jobs (e.g. for managers or rangers)?**

  Many jobs are provided by the site for protected area managers and researchers and for tourism staff both within the sites and its environs.

Summary of benefits

Of major significance, the site provides both national and global benefits particularly in terms of environmental services, nature conservation, cultural and tourism / recreation.

Projects

Compilation of active conservation projects

№	Organization/ individuals	Project duration	Brief description of Active Projects
1	Ezemvelo KZN Wildlife, Endangered Wildlife Trust, Wildlands Conservation Trust.		Vulture research and monitoring programme
2	Ezemvelo KZN Wildlife		Fire management and monitoring project incorporates a data base, implementation of a control burning plan, and management of a long-term experimental grassland fire plots.
3	Ezemvelo KZN Wildlife		Alien invasive plant control programme.
4	Ezemvelo KZN Wildlife		Anti-poaching law enforcement programme
5	Ezemvelo KZN Wildlife, Bali Mountain National Park, Ethiopia, Frankfurt Zoological Society, and GIZ (coordinates a GEF project in Ethiopia).		‘Sister Parks’ cooperation programme with the Bali Mountain National Park that allows for exchanges in protected area management staff between the two Parks.

Compilation of potential site needs

№	Site need title	Brief description of potential site needs	Support needed for following years
1	Ezemvelo KZN Wildlife	Strategic alien invasive plant plan and research so as to meet time-bound targets for management and control. Additional financial resources are required to fund the control interventions.	
2	N.A.	Research projects on the effects of global climate change on various elements of biodiversity and ecosystem services.	

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